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Report on Press Releases

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PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

CHANGE CONTROL

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1. Introduction

As part of its communication activities, REProMag planned to issue press releases in different online and printed magazines and journals in order to promote the project, its goals and its achievements on a regional, national and European level in order to reach a wider audience, although some press releases should be explicitly dedicated to the industry.

All partners were invited to contribute with press releases whether in English or in their own language. S2i gathered the information in the frame of the dissemination roadmap.

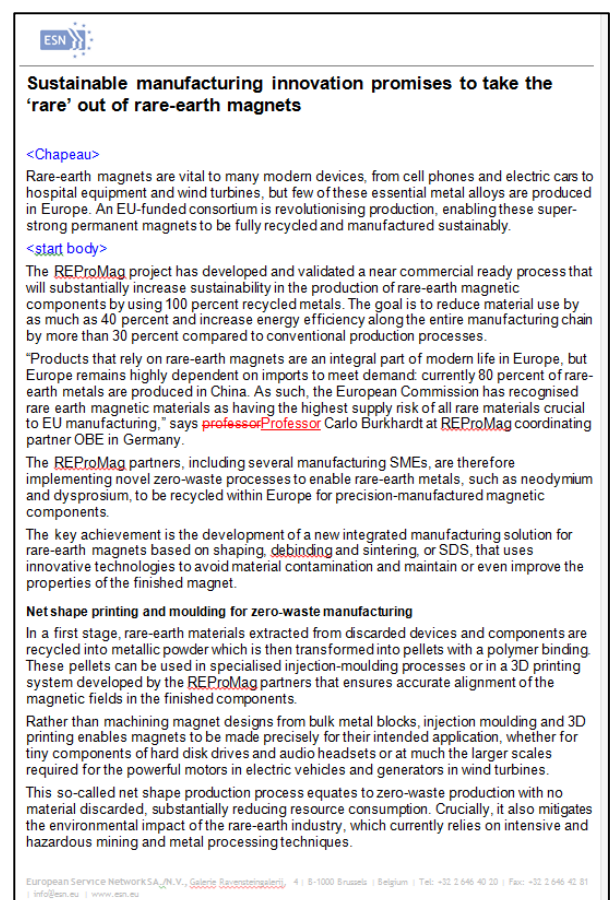
2. Results

In total, **22 press releases** – among which 4 dedicated exclusively to the industry – were issued by several REProMag partners, mainly in English and in German and with mixed audience: science, industry (including potential customers), general public, policy makers.

In addition, subcontractor ESN (<https://www.esn.eu/>) of the European Commission approached REProMag in September 2017 to publish an article about the project as a success story on the DG Research website:

- <https://ec.europa.eu/programmes/horizon2020/en/newsroom/achievements/>
- https://ec.europa.eu/research/infocentre/success_stories_en.cfm

Together with the journalist of ESN, an article was drafted with OBE and S2i. The publication is planned to be issued in 2018.



Sustainable manufacturing innovation promises to take the 'rare' out of rare-earth magnets

<Chapeau>

Rare-earth magnets are vital to many modern devices, from cell phones and electric cars to hospital equipment and wind turbines, but few of these essential metal alloys are produced in Europe. An EU-funded consortium is revolutionising production, enabling these super-strong permanent magnets to be fully recycled and manufactured sustainably.

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The REProMag project has developed and validated a near commercial ready process that will substantially increase sustainability in the production of rare-earth magnetic components by using 100 percent recycled metals. The goal is to reduce material use by as much as 40 percent and increase energy efficiency along the entire manufacturing chain by more than 30 percent compared to conventional production processes.

"Products that rely on rare-earth magnets are an integral part of modern life in Europe, but Europe remains highly dependent on imports to meet demand: currently 80 percent of rare-earth metals are produced in China. As such, the European Commission has recognised rare earth magnetic materials as having the highest supply risk of all rare materials crucial to EU manufacturing," says professor Professor Carlo Burkhardt at REProMag coordinating partner OBE in Germany.

The REProMag partners, including several manufacturing SMEs, are therefore implementing novel zero-waste processes to enable rare-earth metals, such as neodymium and dysprosium, to be recycled within Europe for precision-manufactured magnetic components.

The key achievement is the development of a new integrated manufacturing solution for rare-earth magnets based on shaping, debinding and sintering, or SDS, that uses innovative technologies to avoid material contamination and maintain or even improve the properties of the finished magnet.

Netshape printing and moulding for zero-waste manufacturing

In a first stage, rare-earth materials extracted from discarded devices and components are recycled into metallic powder which is then transformed into pellets with a polymer binding. These pellets can be used in specialised injection-moulding processes or in a 3D printing system developed by the REProMag partners that ensures accurate alignment of the magnetic fields in the finished components.

Rather than machining magnet designs from bulk metal blocks, injection moulding and 3D printing enables magnets to be made precisely for their intended application, whether for tiny components of hard disk drives and audio headsets or at much the larger scales required for the powerful motors in electric vehicles and generators in wind turbines.

This so-called net shape production process equates to zero-waste production with no material discarded, substantially reducing resource consumption. Crucially, it also mitigates the environmental impact of the rare-earth industry, which currently relies on intensive and hazardous mining and metal processing techniques.

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List of REProMag press releases:

Partner(s)	What	When	Where	More details on the action(s)	Type of Audience	Weblink (for online material)
MUL	Innovative Magnete	January 2015	Triple M (corporate magazine of MUL)	Article in German describing the project	general public	–
S2i	Ressourceneffizienz für die Hartmagnetfertigung	December 2015	S2i/SEZ-Nachrichten Dezember 2015	Article in German about the project in partner newsletter	general public, scientific, industry	https://www.steinbeis-europa.de/files/sez-jahresbericht-2015_web.pdf
S2i	Ressourceneffizienz für die Hartmagnetfertigung	December 2015	Werkstoffe	Article in German about the project and its first results	industry	https://www.steinbeis-europa.de/files/sez-jahresbericht-2015_web.pdf
S2i	EU Projekt REProMag: Die Hartmagnetfertigung optimieren und Material wieder verwerten	December 2015	SEZ/S2i Annual Report 2015	Article in German about the project, past activities and outlook upcoming activities	general public, scientific, industry	https://www.steinbeis-europa.de/files/sez-jahresbericht-2015_web.pdf
HAGE	Success Story	February 2015	Additive Fertigung (magazine)	Feedback of an HAGE3D-User and latest news from HAGE3D including Repromag activities	industry	–
OBE	OBE entfaltet Magnetwirkung	6 May 2016	PZ news	Online article in German about the project	general public	https://www.pz-news.de/wirtschaft_artikel,-OBE-entfaltet-Magnetwirkung-_arid,1096136.html
S2i	Halbzeit des EU-Projekts REProMag! Erste Ergebnisse bei der Optimierung der Hartmagnetfertigung	June 2016	S2i/SEZ Innovation Info	Article in German about the project in partner newsletter	general public, scientific, industry	–
S2i	Verbesserte Hartmagnetfertigung mit innovativer und ressourceneffizienter Herstellungsmethode - Press release idW	5 July 2016	idw-online (online magazine)	Online article in German about the project	science	http://idw-online.de/de/news655715
S2i	Seltene Erden, stark gefragt. EU-projekt will die Hartmagnetfertigung optimieren	July 2016	Steinbeis Transfer 2016	Project description & first results in German	general public	–
OBE	Verbesserte Hartmagnetfertigung mit ressourceneffizienter Herstellungsmethode	5 August 2016	German BMFB online portal MatRessource	Online article in German on the project in the frame of REPM, released by the German Ministry for Education and Research (BMBF)	science, industry, general public, policy makers, media	http://www.matresource.de/news/artikel/verbesserte-hartmagnetfertigung-mit-ressourceneffizienter-herstellungsmethode/

OBE	Ressourceneffiziente Herstellung von Permanentmagneten	January 2017	Kunststoffe	Article in German presenting the project, its goals, innovations and results	industry	https://www.kunststoffe.de/kunststoffe-zeitschrift/archiv/artikel/das-neue-sds-verfahren-ermoeglicht-die-abfallfreie-fertigung-komplexer-magnetgeometrien-2454775.html
OBE	Der Ruf der Forschung OBE-Geschäftsführer Burkhardt wechselt in die Schmucktechnologie	18 March 2017	BNN - Pforzheimer Kurier	Article in German about the research activities of coordinator Carlo Burkhardt with mention of REProMag as one major research project funded by the EU	general public	-
S2i	Ressourceneffizienz bei der Hartmagnetfertigung	April 2017	Werkstoffe	Article about an award for OBE thanks to REProMag	industry	-
MUL	REProMag - resource efficient production of rare-earth magnets from recycling material	June 2017	Biennial Report of the Department Polymer Engineering and Science, MUL	Article about the project	Industry, science	http://www.kunststofftechnik.at/fileadmin/shares/kunststofftechnik/docs/Jahresbericht_KT-2015-2016-web.pdf
OBE	Umwelttechnikpreis Baden-Württemberg für EU-Forschungsprojekt REProMag	23 August 2017	idw-online (online magazine)	Online article in German about OBE receiving for the whole REProMag Consortium the environmental technology award of Baden-Württemberg 2017 in the category "material efficiency"	general public, science, industry	https://idw-online.de/de/news679823
OBE	Effiziente Permanentmagneten-Herstellung prämiert	25 August 2017	smartworld.de (online magazine)	Online article in German about OBE receiving for the whole REProMag Consortium the environmental technology award of Baden-Württemberg 2017 in the category "material efficiency"	general public, science, industry	http://www.smarterworld.de/smart-components/passive-baelemente/artikel/144946/
OBE	REProMag: Technikpreis für Permanent-Magneten aus recycelten Seltenerden	28 August 2017	recyclingportal.eu (online magazine)	Online article in German about OBE receiving for the whole REProMag Consortium the environmental technology award of Baden-Württemberg 2017 in the category "material efficiency"	general public, science, industry	http://recyclingportal.eu/Archive/34377
OBE	REProMag: Technikpreis für Permanent-Magneten aus recycelten Seltenerden	28 August 2017	GreenTech-Germany.com (online magazine)	Online news in German about OBE receiving for the whole REProMag Consortium the environmental technology award of Baden-Württemberg 2017 in the category "material efficiency"	general public, science, industry	http://2fwww.greentech-germany.com/repromag-technikpreis-fuer-permanent-magneten-aus-recycelten-seltenerden-a4194697

OBE	OBE Ohnmacht und Baumgärtner GmbH & Co. KG erhält den 5. Umwelttechnikpreis Baden-Württemberg	7 September 2017	nordschwarzwald.de	Online article in German about the price ceremony for the environmental technology award of Baden-Württemberg 2017 received by OBE for the whole REProMag Consortium in the category "material efficiency"	general public, science, industry, policy makers	https://www.nordschwarzwald.de/service/neues-aus-der-region/news-detail.html?L=1&tx_pxnewsticker_pi1%5Buid%5D=3235&cHash=50aa0c40e9ba3a13cc62c6807e0957f9
OBE	Workshop: Ressourceneffiziente Produktion von Magneten aus seltenen Erden	25 October 2017	wissenschaft-im-dialog.de	Online article in German announcing REProMag's workshop at the Final Event in Geneva	science, industry	https://www.wissenschaft-im-dialog.de/trends-emen/veranstaltungskalender/darstellung/detail/veranstaltung/Workshop_Ressourceneffiziente_Produktion_von_Magneten_aus_seltenen_Erden/?tx_widcalendar_widcalendarevents%5Bfilter%5D%5Bplace%5D=&tx_widcalendar_w
OBE, S2i	Magnets that don't cost the earth	3 November 2017	EU Research Winter 2017, UK	Article about the project, its goals and achievements	general public, science, industry, policy makers	https://issuu.com/euresearcher/docs/eur14_digital_magazine/52
MUL	Resource Efficient Production of Magnets	15 November 2017	WerWasWo Forschung@MUL	Article describing REProMag and scientific outcomes in MUL scientific magazine	general public, science, industry	-

3. Conclusion

REProMag partners issued 22 press releases – among which 4 dedicated exclusively to the industry, mainly in English and in German and could reach a wide, mixed audience. As planned, at least one further publication is planned to be issued after the end of the project, namely an article about REProMag as a success story on the DG Research website. Partners will still be invited to issue at least one press release (online) after the project end in order to support proper exploitation of project results.